Abstract of the Disclosure

Methods for treating a gas mixture of at least propylene and propane, in order to separate the propylene from the propane. The gas mixture is brought into contact with a membrane enables the selective permeation of the propylene with respect to the propane. A propylene-enriched permeate and a propane-enriched retentate is formed. The propylene concentration of the permeate in the membrane is then reduced with a sweeping gas.